

Title (en)  
POLARIZATION SELECTIVE, FREQUENCY SELECTIVE, AND WIDE DYNAMIC RANGE DETECTORS, IMAGING ARRAYS, READOUT INTEGRATED CIRCUITS, AND SENSOR SYSTEMS

Title (de)  
POLARISATIONSELEKTIVE, FREQUENZSELEKTIVE DETEKTOREN MIT BREITEM DYNAMISCHEM BEREICH, ABBILDUNGSARRAYS, INTEGRIERTE ABLESESCHALTUNGEN UND SENSORSYSTEME

Title (fr)  
CAPTEURS SELECTIVES À POLARISATION, SELECTIVES EN FRÉQUENCES À PLAGE DYNAMIQUE ÉTENDUE, RÉSEAU D'IMAGERIE, CIRCUIT INTÉGRÉ DE LECTURE ET SYSTÈMES CAPTEURS

Publication  
**EP 3243054 A2 20171115 (EN)**

Application  
**EP 16704953 A 20160108**

Priority  

- US 201562101713 P 20150109
- US 201562101894 P 20150109
- US 201562101565 P 20150109
- US 201562102523 P 20150112
- US 201562213019 P 20150901
- US 2016012753 W 20160108

Abstract (en)  
[origin: WO2016112355A2] This relates to sensor systems, detectors, imagers, and readout integrated circuits (ROICs) configured to selectively detect one or more frequencies or polarizations of light, capable of operating with a wide dynamic range, or any combination thereof. In some examples, the detector can include one or more light absorbers; the patterns and/or properties of a light absorber can be configured based on the desired measurement wavelength range and/or polarization direction. In some examples, the detector can comprise a plurality of at least partially overlapping light absorbers for enhanced dynamic range detection. In some examples, the detector can be capable of electrostatic tuning for one or more flux levels by varying the response time or sensitivity to account for various flux levels. In some examples, the ROIC can be capable of dynamically adjusting at least one of the frame rate integrating capacitance, and power of the illumination source.

IPC 8 full level  
**G01J 5/08** (2006.01); **G01J 5/02** (2006.01); **G01J 5/20** (2006.01)

CPC (source: EP KR US)  
**G01J 4/04** (2013.01 - US); **G01J 5/0225** (2013.01 - EP KR US); **G01J 5/0846** (2013.01 - EP KR US); **G01J 5/0853** (2013.01 - EP KR US); **G01J 5/20** (2013.01 - EP KR US); **G01J 5/59** (2022.01 - EP KR US); **G01J 2005/202** (2013.01 - EP KR US)

Citation (search report)  
See references of WO 2016112355A2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2016112355 A2 20160714; WO 2016112355 A3 20160922; WO 2016112355 A8 20170817**; CN 107580673 A 20180112; EP 3243054 A2 20171115; KR 20170092677 A 20170811; KR 20190114028 A 20191008; SG 10201806077V A 20180830; SG 11201705483Y A 20170830; US 10323987 B2 20190618; US 10670466 B2 20200602; US 2017370776 A1 20171228; US 2018143078 A1 20180524; US 2019250041 A1 20190815; US 9939322 B2 20180410

DOCDB simple family (application)  
**US 2016012753 W 20160108**; CN 201680005163 A 20160108; EP 16704953 A 20160108; KR 20177018774 A 20160108; KR 20197028688 A 20160108; SG 10201806077V A 20160108; SG 11201705483Y A 20160108; US 201615542425 A 20160108; US 201815873795 A 20180117; US 201916396217 A 20190426